

REMARKS

Claims 1-18 and 21-24 are pending in the application and are at issue.

Claims 1-18 and 21-24 stand rejected under 35 U.S.C. §102(b) as being anticipated by, and alternatively under 35 U.S.C. §103 as being obvious over, WO 01/56625 (WO ‘625). The examiner contends that WO ‘625 anticipates the present claims even though the present claims differ from WO ‘625 by claiming a pressing temperature of not less than 60°C. The examiner further contends that WO ‘625 anticipates or renders obvious the presently claimed absorbent material, even though WO ‘625 utilizes a different pressing process. Applicants traverse this rejection.

In particular, the examiner contends that the similarities between WO ‘625 and the present claims are sufficient to support a 35 U.S.C. §102(b)/§103 rejection, and that the burden is now on the applicant to demonstrate nonobvious differences between the presently claimed superabsorbent material and WO ‘625. It is submitted that applicants have shown nonobvious differences between the present claims and WO ‘625, in substantial detail, in the specification.

First, the examiner is directed to page 2, lines 3-13, of the specification stating:

“Compression by the action of pressure to produce “ultrathin” hygiene articles is described in WO 01/56625. However, the material is subjected to a pressure of about 5.5 bar (fabric area: 0.056m²; 7.000 [sic] pounds load) and a temperature of 50°C for a period of 48 seconds. This achieves a compression from originally 4.5 mm to 0.67 mm. These experimental conditions were reproduced and two differences and disadvantages compared with the present invention were ascertained:

- a) the material is not dimensionally stable, ie it expands to as much as 1.5 mm over 2 weeks and to as much as 2.4 mm over 8 weeks.
- b) The method described in the present invention makes it possible to produce significantly thinner, yet very flexible materials than the material described in WO 01/56625.”

This excerpt from the specification identifies two disadvantages associated with the absorbent material of WO ‘625, i.e., a lack of dimensional instability and thicker, more inflexible absorbent materials than desired for “ultrathin” hygiene articles, e.g., articles used by incontinent adults that must be as thin as possible for wear in public.

Second, the examiner is directed to page 9, line 4 through page 11, Table B of the specification comparing presently claimed absorbent materials to materials produced according to WO '625. The data for FSEV and EVUL values at page 10 of the specification show that these values are unexpectedly high for the presently claimed absorbent materials compared to a material prepared in accordance with WO '625.

In particular, as stated at page 10, lines 2-5 of the specification with respect to FSEV values:

"The data show that the FSEV values of the material according to the present invention (with the exception of 80 bar/150°C) are distinctly higher than those of the compressed material described in WO 01/56625 after just 30-60 seconds. The data also show that the final value is almost reached after about 300 seconds."; and

with respect to EVUL values at page 10, lines 13-16 of the specification:

"The samples produced according to the present invention are faster than the comparative sample in water uptake under pressure of 0.5 psi. Only the sample produced at 80°C/150 bar gives the same value after 10 seconds, but here too all other measured results are better than with the comparative sample."

The comparative sample referred to was prepared in accordance with WO '625, i.e., 5 bar, 48 seconds, and 50°C (see specification, page 9, lines 32-33).

The patent specification, at page 9, lines 6-17, provides additional evidence of the unexpected results provided by a presently claimed absorbent material over an absorbent material of WO '625, stating:

"The compressed material is dimensionally stable; that is, the material expands insignificantly, if at all, even in the course of prolonged storage at room temperature and relative humidities of preferably less than 60%. This dimensional stability was found with all samples which were compressed at a temperature of more than 60°C and a pressure of more than 5 bar. In the case of the comparative material produced according to WO 01/56625, in contrast, an expansion of the material took place under the abovementioned conditions:

Sample [mm]	Thickness directly after compression [mm]	Thickness after 60 days
1	0.8	2.4
2	0.7	1.8
3	0.7	1.9
4	0.8	2.3"

The above data also shows that the materials of WO ‘625 do not inherently possess properties that anticipate or render obvious the present claims, particularly with respect to claims 6-8, as contended by the examiner.

Accordingly, in view of the data provided in the specification, it is submitted that an absorbent material prepared as claimed possesses nonobvious differences over the material disclosed in WO ‘625. In particular, the present claims recite an absorbent material having substantially superior properties to absorbent materials of WO ‘625, thereby indicating that differences exist between the presently claimed absorbent material and the WO ‘625 disclosure. In addition, the data presented in the specification shows that those differences are nonobvious differences.

In addition to the nonobvious differences between the presently claimed absorbent materials and WO ‘625 that are fully and clearly set forth in the specification, the WO ‘625 reference provides no apparent reason for a person skilled in the art to press at a temperature of not less than 60°C. WO ‘625 provides no hint or suggestion, let alone any incentive, for a person skilled in the art to consider increasing the pressing temperature with any reasonable expectation of providing the unexpectedly improved results demonstrated by the presently claimed absorbent materials.

WO ‘625 utilizes a pressing temperature of 50°C in conformance with a standard test in the art that provides guidance on how a superabsorbent material will behave in a diaper after an infant has sat in a wetted diaper, then stood up. WO ‘635 therefore has not remotely

addressed or considered whether a change in pressing temperature would have an effect on absorption properties.

Third, the examiner's reasons supporting the 35 U.S.C. §102(b)/§103 rejection of claim 21 is incorrect. Claim 21 is a process claim, not a product by process claim, and clearly is neither anticipated by nor obvious over the teachings of WO '625 for the reasons set forth above.

In summary, for all the reasons set forth above, it is submitted that claims 1-18 and 21-24 are neither anticipated by, nor obvious over, WO '625 under 35 U.S.C. §102(b) or §103, and that the rejection should be withdrawn. An absorbent material prepared in accordance with the present claims differs from WO '625 as demonstrated by the substantial improvements, for example in dimensional stability, demonstrated by the present absorbent materials.

Claims 21-24 stand rejected as being obvious over WO '625 in view of Soerens et al., U.S. Patent No. 7,115,321 ('321). Applicants traverse this rejection.

The patentability of claims 21-24 over the WO '625 reference alone has been discussed above. The '321 patent fails to overcome the deficiencies of WO '625. The '321 patent is directed to an absorbent binding coating. However, the '321 patent fails to teach or suggest that a compressed material prepared according to claim 1 can be used as the absorbent binding coating. See the Example of the '321 patent at columns 16 and 17. The '321 patent also does not address the dimensional stability overcome by the presently claimed absorbent material.

It is submitted that, in view of the novelty and nonobviousness of the absorbent material of claim 1, uses of the novel and nonobvious material also are novel and nonobvious. Accordingly, it is submitted that the rejection of claims 22-24 over a combination of WO '625 and the '321 patent is in error and should be withdrawn.

It is submitted that present claims are in a form and scope for allowance. An early and favorable action on the merits is respectfully requested.

Application No. 10/532,279
Response dated August 17, 2007
Reply to Office Action of May 17, 2007

Docket No.: 29827/41149

Should the examiner wish to discuss the foregoing, or any matter of form in an effort to advance this application toward allowance, the examiner is urged to telephone the undersigned at the indicated number.

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Respectfully submitted,

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